

CLAIMS

1. A method of heating glass, wherein glass is led through a tempering furnace by means of a conveyor consisting of rollers, whereby the glass is heated from above and below, whereby air is blown at least onto the upper surface of the glass to heat the glass in such a way that air is sucked from the inside of the tempering furnace, the air being circulated in such a way that it is blown back onto the glass; the air sucked from the tempering furnace is pressurized by applying the compressor principle to an overpressure of over 0.1 bar relative to the pressure in the tempering furnace; the pressurized air is led by means of a pipe system into the vicinity of the surface of the glass located upon the rollers; and the air is blown substantially perpendicularly onto the upper surface of the glass.

2. A method according to claim 1, wherein the lower surface of the glass is heated by blowing hot air jets substantially perpendicularly onto the lower surface of the glass, whereby said hot air jets are provided by sucking air from the inside of the tempering furnace and by pressurizing the air sucked from the tempering furnace by applying the compressor principle to an overpressure of over 0.1 bar compared with the pressure in the tempering furnace.

3. A method according to claim 1, wherein the temperature of the air to be blown is over 600 °C.

4.5 4. A method according to claim 1, wherein the glass is also heated by means of electric resistors.

5.8 5. A method according to claim 1, wherein the pressurization unit is used for the pressurization of the air, the rotational velocity of which pressurization unit is over 15,000 rotations per minute.

6.7 6. A method according to claim 1, wherein the velocity of the air is arranged to be higher than 50 m/s when it exits from the pipe system towards the surface of the glass.

7.8 7. A method according to claim 1, wherein the pipe system comprises blow pipes arranged in the vicinity of the surface of the glass, which blow pipes are provided with holes in such a way that the air is led onto the surface of the glass through said holes and wherein the diameter of said holes is below 2.5 mm.

8.8 8. An apparatus for heating glass, which apparatus comprises a

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tempering furnace comprising horizontal rollers arranged to support the glass and to form its conveyor; and means for sucking air from the inside of the tempering furnace and for circulating the air to be blown back at least onto the upper surface of the glass, comprising a pressurization unit; a return pipe of the upper side; and blow pipes of the upper side, which blow pipes are arranged in the vicinity of the surface of the glass, whereby the return pipe is arranged to convey air from the tempering furnace to the pressurization unit, and the pressurization unit is arranged to pressurize the air conveyed from the tempering furnace to an overpressure of 0.1 bar relative to the pressure of the tempering furnace, whereby the pressurized air is hot and arranged to be blown through the blow pipes of the upper side substantially perpendicularly onto the upper surface of the glass.

110. An apparatus according to claim 8, wherein the apparatus comprises a pressurization unit, a lower side return pipe and lower side blow pipes, whereby the lower side return pipe is arranged to lead air from the tempering furnace to a second pressurization unit, whereby the second pressurization unit is arranged to pressurize the air conveyed from the tempering furnace applying the compressor principle to an overpressure of over 0.1 bar relative to the pressure of the tempering furnace, and whereby the pressurized air is hot and arranged to be blown through the lower side blow pipes substantially perpendicularly onto the lower surface of the glass.

111. An apparatus according to claim 8, wherein the temperature of the air to be blown is over 600 °C.

112. An apparatus according claim 8, wherein the pressurization unit is arranged to pressurize the air conveyed from the tempering furnace to an overpressure of over 1 bar relative to the pressure of the tempering furnace.

113. An apparatus according to claim 8, wherein the apparatus comprises electric resistors for heating the glass.

114. An apparatus according to claim 8, wherein the rotational velocity of the pressurization unit is over 15,000 rotations per minute.

115. An apparatus according to claim 9, wherein the velocity of the air is arranged higher than 50 m/s when it exits from the blow pipe towards the surface of the glass.

116. An apparatus according to claim 8, wherein the blow pipes are provided with holes through which the air flows towards the surface of the glass, and wherein the diameter of said holes is below 2.5 mm.